

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method for determining the presence of antibodies to HIV in a body fluid, comprising:

(a) providing a body fluid;

(b) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing at least one polypeptide of no more than 60 amino acid residues in length and having ~~one of~~ the following polypeptide sequence[[s]]:

(II) BRU124EX (SEQ ID NO: 2)

~~W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg~~  
~~Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly~~  
~~Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z~~

(III) BRU124F1X (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-  
Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-  
Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-  
Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

~~W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-~~  
~~Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-~~  
~~Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z~~

(V) ROD 124E1 (SEQ ID NO: 5)

~~W-X Lys Leu Lys Asp Phe Arg Val Tyr Phe Arg Glu-Gly Arg Asp Gln Leu Trp Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu Gly Ala Y Z~~

(VI) ROD 124EX (SEQ ID NO: 6)

~~W-X Leu Gln Ala Lys Asn Ser Lys Leu Lys Asp Phe Arg Val Tyr Phe Arg Glu Gly Arg Asp Gln Leu Trp Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu Gly Ala Y Z~~

(VII) ROD 124C2X (SEQ ID NO: 7)

~~W-X Lys Leu Lys Asp Phe Arg Val Tyr Phe Arg Glu-Gly Arg Asp Gln Leu Trp Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu Gly Ala Val Leu Val Lys Val Gly Thr Asp Ile Lys Y Z~~

(VIII) ROD 124C1X (SEQ ID NO: 8)

~~W-X Tyr Phe Arg Glu Gly Arg Asp Gln Leu Trp Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu Gly Ala Val Leu Val Lys Val Gly Thr Asp Ile Lys Y Z~~

(IX) ROD 123C3X (SEQ ID NO: 9)

~~X Lys Leu Lys Asp Phe Arg Val Tyr Phe Arg Glu-Gly Arg Asp Gln Leu Trp Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu Gly Ala Val Leu Val Lys Val Gly Thr Asp Ile Lys Y Z~~

(X) POL2A1 (SEQ ID NO: 10)

~~W-X Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu-Gly Ala Val Leu Val Lys Val Gly Thr Asp Ile Lys Ile-He Pro Arg Arg Lys Ala Lys Ile Ile Y Z~~

(XI) ROD124C5X (SEQ ID NO: 11)

~~W-X Lys Leu Lys Asp Phe Arg Val Tyr Phe Arg Glu-Gly Arg Asp Gln Leu Trp Lys Gly Pro Gly Glu Leu Leu Trp Lys Gly Glu Gly Ala Val Leu Val Lys Val Gly Y Z~~

wherein W is either a H of the amino terminal NH<sub>2</sub> group of the polypeptide or an additional amino acid bonded to the amino terminal NH<sub>2</sub> group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH<sub>2</sub>; and

(c) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

2. (Original) The method according to claim 1 in which the polypeptide is conjugated to a carrier macromolecule.

3. (Original) The method according to claim 1 in which the polypeptide is immobilized.

4. (Original) The method according to claim 1 in which the immunospecific binding is detected by immunoprecipitation.

5. (Original) The method according to claim 1 in which the composition includes at least one polypeptide selected from a polymerase protein of HIV-1 and one selected from a polymerase protein of HIV-2.

6. (Canceled)

7. (Canceled)

8. (Original) The method according to claim 1 in which immunospecific binding between the polypeptide or protein and the antibody component of the body fluid is detected by:

(i) removing unbound components from immune complexes formed in the immunoreaction mixture;

- (ii) adding a labeled antibody to the immunoreaction mixture, the labeled antibody being capable of immunospecifically binding to a component of the immune complexes and the label providing a detectable signal; and
- (iii) determining whether the labeled antibody binds to the immune complexes.

9. (Original) The method according to claim 8 in which the label comprises an enzyme which is detected by the addition of the enzyme substrate.

10. (Original) The method according to claim 8 in which the label comprises a radiolabel.

11. (Original) The method according to claim 8 in which the label comprises a fluorescent label.

12. (Currently amended) A method for determining the presence of antibodies to HIV-1 in a body fluid, comprising:

- (a) providing a body fluid;
- (b) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing at least one polypeptide of no more than 60 amino acid residues in length and having one of the following polypeptide sequence[[s]]:

(II) BRU124EX (SEQ ID NO: 2)

~~W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z~~

(III) BRU124FX1 (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-

Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

~~W-X Lys Ile Gln Asp Phe Arg Val Tyr Tyr Arg Asp Ser  
Arg Asp Pro Leu Trp Lys Gly Pro Ala Lys Leu Leu Trp  
Lys Gly Glu Gly Ala Val Val Ile Gln Asp Asn Y-Z~~

wherein W is either a H of the amino terminal NH<sub>2</sub> group of the polypeptide or an additional amino acid bonded to the amino terminal NH<sub>2</sub> group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH<sub>2</sub>; and

(c) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

13-25. (Canceled)

26. (Withdrawn - currently amended) A method for determining the presence of antibodies to HIV in a body fluid, comprising:

(a) contacting, under conditions which permit immunospecific binding to form a reaction mixture, the body fluid with a composition containing a combination of HIV-1 and HIV-2 envelope and polymerase polypeptides, said combination comprising

(i) at least one HIV-1 envelope polypeptide;

(ii) at least one HIV-2 envelope polypeptide;

(iii) at least one HIV-1 polymerase polypeptide having [[a]] the following polypeptide sequence selected from the group consisting of:

(II) BRU124EX (SEQ ID NO: 2)

~~W-X-Leu-Gln-Lys-Gln-Ile-Thr-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z~~

(III) BRU124F1X (SEQ ID NO: 3)

W-X-Lys-Ile-Gln-Asn-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Ser-Asp-Ile-Lys-Y-Z

(IV) BRU124F3X (SEQ ID NO: 4)

~~W-X-Lys-Ile-Gln-Asp-Phe-Arg-Val-Tyr-Tyr-Arg-Asp-Ser-Arg-Asp-Pro-Leu-Trp-Lys-Gly-Pro-Ala-Lys-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Val-Ile-Gln-Asp-Asn-Y-Z~~

and

- (iv) at least one HIV-2 polymerase polypeptide having a polypeptide sequence selected from the group consisting of:

(V) ROD 124E1 (SEQ ID NO: 5)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VI) ROD 124EX (SEQ ID NO: 6)

W-X-Leu-Gln-Ala-Lys-Asn-Ser-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Y-Z

(VII) ROD 124C2X (SEQ ID NO: 7)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(VIII) ROD 124C1X (SEQ ID NO: 8)

W-X-Tyr-Phe-Arg-Glu-Gly-Arg-Asp-Gln-Leu-Trp-Lys-  
Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-Gly-Ala-Val-  
Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Y-Z

(IX) ROD 123C3X (SEQ ID NO: 9)

X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-Gly-  
Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-  
Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-  
Ile-Lys-Y-Z

(X) POL2A1 (SEQ ID NO: 10)

W-X-Lys-Gly-Pro-Gly-Glu-Leu-Leu-Trp-Lys-Gly-Glu-  
Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Thr-Asp-Ile-Lys-Ile-  
Ile-Pro-Arg-Arg-Lys-Ala-Lys-Ile-Ile-Y-Z

(XI) ROD124C5X (SEQ ID NO: 11)

W-X-Lys-Leu-Lys-Asp-Phe-Arg-Val-Tyr-Phe-Arg-Glu-  
Gly-Arg-Asp-Gln-Leu-Trp-Lys-Gly-Pro-Gly-Glu-Leu-Leu-  
Trp-Lys-Gly-Glu-Gly-Ala-Val-Leu-Val-Lys-Val-Gly-Y-Z

wherein W is either a H of the amino terminal NH<sub>2</sub> group of the polypeptide or an additional amino acid bonded to the amino terminal NH<sub>2</sub> group of the polypeptide, the additional amino acid being selected to facilitate coupling of the polypeptide to a carrier protein or to a support; X is absent or Cys-Gly-Gly; Y is absent or Cys; and Z is OH or NH<sub>2</sub>; and

(b) detecting whether immunospecific binding has occurred between the polypeptide and an antibody component of the body fluid in which an immune complex is formed and in which the detection of the immune complex indicates the presence of antibodies to HIV in the body fluid.

27. (Canceled)

28. (Canceled)